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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,342	01/27/2005	Donald Horton	020512.0005US	5752

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EXAMINER

FISHMAN, MARINA

ART UNIT	PAPER NUMBER
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2832

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/523,342	Applicant(s) HORTON ET AL.	
	Examiner Marina Fishman	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date <u>01/27/2005</u></p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p> |
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DETAILED ACTION

General status

1. This is a First Action on the Merits. Claims 1 - 11 (Claim 5 is missing and therefore there are only 11 claims in the case) are pending in the case and are being examined.

Claim Objections

2. Claim 1 is objected to because of the following informalities: Claim 1, line 2, "such detent" should be changed to --said detent--. Appropriate correction is required.

3. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 6 – 12 have been renumbered as claims 5 – 11, the dependency of claims has been adjusted accordingly. The Examiner has used re-numbered claims in the Office Action.

Applicant is required to refer to claims by their new numbers only.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 2 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2, it is not clear what is meant by "wherein operation of the detent subassembly is independent of the knob." (Since the detent subassembly is mechanically connected to the knob by set screws [177, 307], the detent subassembly cannot be operated independent of the knob.)

Claim 10, fails to set forth the metes and bounds of the claimed invention, hence is vague and indefinite.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacDonald [US 3,754,106] in view of Taniuchi [US 5,801,346].

MacDonald discloses a rotary switch assembly [Figures 1 – 5] comprising:

- a detent subassembly [92,94], having single spring [84, 86]; and
- a knob [38] that substantially covers the detent sub-assembly [Figure 5].

Regarding Claim 1 MacDonald discloses the instant claimed invention except for a single spring, or the detent sub-assembly that is located above and below the panel. It

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would have been obvious to one of ordinary skill in the art to provide knob directly connected to shaft [62] and provide a single spring instead of two springs, in order to reduce number of parts. Taniuchi [Figure 1] discloses a switch assembly provided with flanges [17], positioned just above the base of the terminals. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide mounting flanges to the switch assembly of MacDonald and position the flanges just above the base of the terminals as suggested by Taniuchi, so that the switch can be mounted at a lesser distance from a circuit board, the positioning of the flanges being such that the switch assembly would be above and below the panel.

Regarding Claim 2, as best understood, the detent subassembly mechanically connected to the knob. Regarding Claims 3 and 4, for modified assembly of MacDonald, two balls [88, 90] will be coupled to the spring and the balls do not extend into the panel. Regarding Claims 5 and 6, MacDonald, discloses a shaft [62] and the shaft extends through the panel (when switch assembly is mounted to the panel) and detent subassembly is coupled to the knob. The shaft is also coupled to an electrical contact [98, 100], which is in electrical contact with a printed circuit board [102].

Regarding Claims 7-9, a sprocket [92], a shaft [62] and a rotor [74] are mechanically connected and define the position of the switch and the position of contact fingers [100] on the circuit board [102], thereby defining the electrical circuit. Regarding Claim 10, method steps of providing a, shaft, a detent sub-assembly, selecting electrical circuit by rotation of the knob, all have been disclosed. Regarding Claim 11, a panel

mounted rotary switch comprising independent detent sub-assembly to manipulate electrical circuit is also disclosed in Figures 1 – 5.

8. Claims 1 – 5, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia [US 3,803,370] in view of Taniuchi [US 5,801,346].

Garcia discloses a rotary switch, the assembly comprising:

- a detent subassembly [28], having single spring [46]; and
- a knob [15,25] that substantially covers the detent sub-assembly [Figure 2].

Regarding Claim 1 Garcia discloses the instant claimed invention except for the detent sub-assembly being located above and below a panel. Taniuchi discloses a switch assembly provided with flanges [17, Figure 1], positioned just above the base of the terminals. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide mounting flanges to the switch assembly of Garcia, and position the flanges just above the base of the terminals as suggested by Taniuchi, so that the switch assembly can be mounted to a panel. The positioning of the flanges being such that the switch assembly would be above and below the panel.

Regarding Claim 2, as best understood, the detent subassembly mechanically connected to the knob. Regarding Claims 3 and 4, two balls [45] are coupled to the spring and the balls do not extend into the panel. Regarding Claim 5, Garcia, discloses a shaft [40], and the shaft extends through the panel (when switch assembly is mounted to the pane) and detent subassembly is coupled to the knob. Regarding Claim 10 method steps of providing a, shaft, a detent sub-assembly, selecting electrical circuit by

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rotation of the knob, all have been disclosed. Regarding Claim 11, a panel mounted rotary switch comprising independent detent sub-assembly to manipulate electrical circuit is disclosed in Figures 1-12.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's invention. Fowler et al. [US 4,625,084], Nation et al. [US 4,891,476], Shono [US 6,067,424], Branch et al. [US 5,345,050], Tanaka et al. [US 4,857,677], Grundig [US 3,394,236] and Allison et al. [US 3,311,718] all disclose rotary switches. Applicant also should consider these references in response to this office action. Should issue arise concerning the rejection presented above, these references may be relied upon in a subsequent action to support the lack of novelty or obviousness of claimed subject matter to one of ordinary skill in the art.

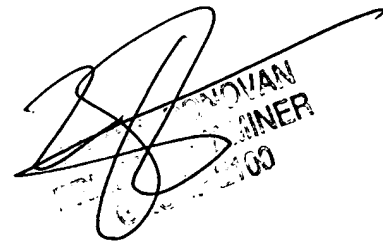
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Fishman whose telephone number is 571-272-1991. The examiner can normally be reached on 7-5 M-T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marina Fishman
February 7, 2006

A handwritten signature in black ink, appearing to be "D. J. Fishman", is written over a circular stamp. The stamp contains the text "MARINA FISHMAN" and "FEB 7 2006" in a circular arrangement.